

WHAT IS CLAIMED IS:

1. A disc device comprising:

a disc driving section including a turntable;

a transport roller operable to transport a disc towards the disc driving section;

a positioning member disposed closer to a back side of the disc device than the disc driving section in a disc insertion direction, wherein an outer peripheral edge of the disc that is transported by the transport roller comes into contact with the positioning member and is positioned so that a central portion of the disc is set at the disc driving section;

a detection section disposed closer to a front side of the disc device than the disc driving section in the disc insertion direction, the detection section being pushed and moved by the outer peripheral edge of the disc that is transported towards the disc driving section;

a transmitting member operable to transmit movement of the detection section to the positioning member;

a roller supporting member operable to move the transport roller to a transport position where the transport roller is capable of transporting the disc and to a retreat position where the transport roller is separated from the disc; and

a restraining section disposed at the roller supporting member,

wherein when the transport roller moves to the retreat position, the detection section is restrained by being moved in a predetermined direction by the restraining section, and the movement of the detection section when restraining the detection section is transmitted to the positioning member through the transmitting member, so that the positioning member moves so as to separate from the outer peripheral edge of the disc.

2. The disc device of Claim 1, wherein the roller supporting member moves the transport roller to the transport position and to the retreat position by rotating around a shaft that is substantially parallel to a disc surface, and wherein

the restraining section is disposed at a portion of the roller supporting member that approaches the disc when the transporter roller moves towards the retreat position.

3. The disc device of Claim 1, wherein the restraining section has a recess, and wherein, when the transport roller moves from the transport position to the retreat position, the detection section is restrained by being guided into the recess.

4. The disc device of Claim 3, wherein the recess extends in an inclined manner with respect to a central line of movement of the disc that is transported by the transport roller, and wherein, when the transport roller moves from the transport position to the retreat position, the detection section moves in the predetermined direction by being guided to the recess.

5. The disc device of Claim 1, wherein the detection section is urged in a direction in which the detection section contacts the outer peripheral edge of the disc that is transported, and wherein the restraining section comprises a restricting portion and a recess, the restricting portion restricting movement of the detection section in the urging direction when the transport roller is set at the transport position, the recess guiding the detection section that is separated from the restricting portion when the transport roller moves towards the retreat position.

6. The disc device of Claim 5, wherein the recess extends in an inclined manner with respect to a central line of movement of the disc that is transported by the transport roller, and wherein, when the transport roller moves from the transport position to the retreat position, the detection section moves in the predetermined direction by being guided to the recess.

7. The disc device of Claim 1, wherein the transmitting member rotates around a rotary shaft that is substantially perpendicular to a disc surface, and wherein the detection section is disposed at one end of the transmitting member and the positioning member is connected to the other end of the transmitting member.

8. The disc device of Claim 1, wherein the transport roller is capable of transporting a large-diameter disc and a small-diameter disc, and wherein, by a difference between an amount of movement of the transmitting member when the detection section is pushed by an outer peripheral edge of the large-diameter disc

and an amount of movement of the transmitting member when the detection section is pushed by an outer peripheral edge of the small-diameter disc, the positioning member is selectively set at one of a position where the positioning member positions a central portion of the small-diameter disc at the disc driving section and a position where the positioning member positions a central portion of the large-diameter disc at the disc driving section.

9. The disc device of Claim 8, further comprising a chassis having the disc driving section including a first guide path and a second guide path that are continuously formed, the second guide path being located closer to the back side of the disc device than the first guide path in the disc insertion direction, wherein the positioning member is movable in the first guide path and the second guide path, by the difference between the amounts of movement of the transmitting member, the positioning member selectively enters one of the first guide path and the second guide path, when the positioning member enters the first guide path, the central portion of the small-diameter disc is capable of being positioned at the disc driving section, and when the positioning member enters the second guide path, the central portion of the large-diameter disc is capable of being positioned at the disc driving section.

10. The disc device of Claim 1, wherein when the detection section is pushed and moved by the outer peripheral edge of the disc, insertion of the disc into the disc device and/or ejection of the disc from the disc device are/is detected.

11. A disc device comprising:
 a disc driving section including a turntable;
 a transport roller operable to transport a disc towards the disc driving section
 a positioning member disposed closer to a back side of the disc device than the disc driving section in a disc insertion direction,
 wherein an outer peripheral edge of the disc that is transported by the transport roller comes into contact with the positioning member and is positioned so that a central portion of the disc is set at the disc driving section,

a detection section disposed closer to a front side of the disc device than the disc driving section in the disc insertion direction, the detection section being pushed and moved by the outer peripheral edge of the disc that is transported towards the disc driving section;

a transmitting member operable to transmit movement of the detection section to the positioning member;

a roller supporting member operable to move the transport roller to a transport position where the transport roller is capable of transporting the disc and to a retreat position where the transport roller is separated from the disc; and

a restraining section, disposed at the roller supporting member, including a recess,

wherein when the transport roller moves to the retreat position, the detection section is restrained by being moved in a predetermined direction as a result of being guided into the recess, and the movement of the detection section when restraining the detection section is transmitted to the positioning member through the transmitting member, so that the positioning member moves so as to separate from the outer peripheral edge of the disc.

12. The disc device of Claim 11, wherein the roller supporting member moves the transport roller to the transport position and to the retreat position by rotating around a shaft, that is substantially parallel to a disc surface, and wherein the restraining section is disposed at a portion of the roller supporting member that approaches the disc when the transporter roller moves towards the retreat position.

13. The disc device of Claim 11, wherein the detection section is urged in a direction in which the detection section contacts the outer peripheral edge of the disc, and wherein the restraining section comprises a restricting portion, disposed continuously with the recess, for restricting movement of the detection section in the urging direction when the transport roller is set at the transport position, and wherein the detection section that is separated from the restricting portion is guided into the recess when the transport roller moves from the transport position to the retreat position.

14. The disc device of Claim 11, wherein the recess extends in an inclined manner with respect to a central line of movement of the disc that is transported by the transport roller, and wherein, when the transport roller moves from the transport position to the retreat position, the detection section moves in the predetermined direction by being guided to the recess.

15. The disc device of Claim 11, wherein the transmitting member rotates around a rotary shaft that is substantially perpendicular to a disc surface, and wherein the detection section is disposed at one end of the transmitting member and the positioning member is connected to the other end of the transmitting member.

16. The disc device of Claim 11, wherein the transport roller is capable of transporting a large-diameter disc and a small-diameter disc, and wherein, by a difference between an amount of movement of the transmitting member when the detection section is pushed by an outer peripheral edge of the large-diameter disc and an amount of movement of the transmitting member when the detection section is pushed by an outer peripheral edge of the small-diameter disc, the positioning member is selectively set at one of a position where the positioning member positions a central portion of the small-diameter disc at the disc driving section and a position where the positioning member positions a central portion of the large-diameter disc at the disc driving section.

17. The disc device of Claim 16, further comprising a chassis having the disc driving section including a first guide path and a second guide path that are continuously formed, the second guide path being located closer to the back side of the disc device than the first guide path in the disc insertion direction, wherein the positioning member is movable in the first guide path and the second guide path, wherein by the difference between the amounts of movement of the transmitting member, the positioning member selectively enters one of the first guide path and the second guide path, when the positioning member enters the first guide path, the central portion of the small-diameter disc is capable of being positioned at the disc driving section, and when the positioning member enters the

second guide path, the central portion of the large-diameter disc is capable of being positioned at the disc driving section.

18. A disc device according to Claim 11, wherein when the detection section is pushed and moved by the outer peripheral edge of the disc, insertion of the disc into the disc device and ejection of the disc from the disc device are detected.

19. A disc device comprising:

a disc driving section including a turntable;

a transport roller operable to transport a disc towards the disc driving section;

a positioning member disposed closer to a back side of the disc device than the disc driving section in a disc insertion direction,

wherein an outer peripheral edge of the disc that is transported by the transport roller comes into contact with the positioning member and is positioned so that a central portion of the disc is set at the disc driving section,

a detection section disposed closer to a front side of the disc device than the disc driving section in the disc insertion direction, the detection section being pushed and moved by the outer peripheral edge of the disc that is transported towards the disc driving section;

a transmitting member for transmitting movement of the detection section to the positioning member;

a roller supporting member that rotates around a shaft which is substantially parallel to a disc surface for moving the transport roller to a transport position where the transport roller is capable of transporting the disc and to a retreat position where the transport roller is separated from the disc; and

a restraining section disposed at a portion of the roller supporting member that approaches the disc when the transport roller moves towards the retreat position,

wherein, when the transport roller moves to the retreat position, the detection section is restrained by being moved in a predetermined direction by the restraining section, and the movement of the detection section when restraining the

detection section is transmitted to the positioning member through the transmitting member, so that the positioning member moves so as to separate from the outer peripheral edge of the disc.

20. The disc device of Claim 19, wherein the restraining section has a recess, and wherein when the transport roller moves from the transport position to the retreat position, the detection section is restrained by being guided into the recess.

21. The disc device of Claim 20, wherein the recess extends in an inclined manner with respect to a central line of movement of the disc that is transported by the transport roller, and when the transport roller moves from the transport position to the retreat position, the detection section moves in the predetermined direction by being guided to the recess.

22. The disc device of Claim 19, wherein the detection section is urged in a direction in which the detection section contacts the outer peripheral edge of the disc that is transported, and the restraining section comprises a restricting portion and a recess, the restricting portion restricting movement of the detection section in the urging direction when the transport roller is set at the transport position, the recess guiding the detection section that is separated from the restricting portion when the transport roller moves towards the retreat position.

23. The disc device of Claim 22, wherein the recess extends in an inclined manner with respect to a central line of movement of the disc that is transported by the transport roller, and when the transport roller moves from the transport position to the retreat position, the detection section moves in the predetermined direction by being guided to the recess.

24. The disc device of Claim 19, wherein the transmitting member rotates around a rotary shaft, that is substantially perpendicular to a disc surface, and the detection section is disposed at one end of the transmitting member and the positioning member is connected to the other end of the transmitting member.

25. The disc device of Claim 19, wherein the transport roller is capable of transporting a large-diameter disc and a small-diameter disc, and by a difference between an amount of movement of the transmitting member when the detection

section is pushed by an outer peripheral edge of the large-diameter disc and an amount of movement of the transmitting member when the detection section is pushed by an outer peripheral edge of the small-diameter disc, the positioning member is selectively set at one of a position where the positioning member positions a central portion of the small-diameter disc at the disc driving section and a position where the positioning member positions a central portion of the large-diameter disc at the disc driving section.

26. The disc device according to Claim 25, further comprising a chassis having the disc driving section including a first guide path and a second guide path that are continuously formed, the second guide path being located closer to the back side of the disc device than the first guide path in the disc insertion direction, wherein the positioning member is movable in the first guide path and the second guide path, by the difference between the amounts of movement of the transmitting member, the positioning member selectively enters one of the first guide path and the second guide path, when the positioning member enters the first guide path, the central portion of the small-diameter disc is capable of being positioned at the disc driving section, and when the positioning member enters the second guide path, the central portion of the large-diameter disc is capable of being positioned at the disc driving section.

27. The disc device of Claim 19, wherein when the detection section is pushed and moved by the outer peripheral edge of the disc, insertion of the disc into the disc device and ejection of the disc from the disc device are detected.